

DRAWING AMENDMENTS

By this response, Applicant has amended Figure 2 to show add reference numeral 46 which points to a flange portion. Applicant submits that the flange portion was already shown in the originally filed drawings and simply lacked a reference numeral. As an attachment to this response, Applicant submits a Replacement Sheet and an Annotated Marked-up Drawing. Applicant submits that the amendment to Figure 2 does not introduce new matter, and entry thereof is respectfully requested.

REMARKS

A. Background

Claims 1-28 were pending in the application at the time of the Office Action. The Office Action objected to the specification and drawings on formal grounds. Claims 1-28 were rejected as being anticipated and/or obvious over cited prior art. By this response applicant has amended the specification and drawings so as to address the formal issues. Applicant has also amended claims 1, 3, 11-12, 15, 16, 19-21, 24 and 26; cancelled claims 2, 6-9, 14, 18, 22-23, 25, 27 and 28; and added new claims 29-34. As such, claims 1, 3-5, 10-13, 15-17, 19-21, 24, 26 and 29-34 are presented for the Examiner's consideration in light of the following remarks.

B. Proposed Amendments

1. Specification and Drawings

Page 2 of the Office Action objected to the specification based on various informalities. By this response, applicant has amended the specification to correct various typographical errors. In addition, Applicant has reviewed the specification and diligently attempted to correct any other typographical or spelling errors.

In addition, on Page 2 of the Office Action the Examiner asserted that flange portion 46 discussed on page 13 of the specification was not shown in the drawings. Applicant asserts that the flange portion existed in the originally filed drawings, but lacked a reference numeral to indicate that particular element. By this response applicant has amended Figure 2 to add reference numeral 46 which points to the flange portion. To facilitate the Examiner's consideration and approval of the proposed drawings changes, Applicant has attached herewith a Replacement Sheet and an Annotated Marked-up Drawing.

In view of the foregoing discussion, applicant respectfully submits that the amendments to the drawings and the specification do not introduce new matter and entry thereof is respectfully requested.

2. Claims

Applicant has amended claims 1, 3, 11-12, 15-16, 19-21, 24 and 26 to further clarify the invention. In particular, claims 1 and 21 were amended to recite “a securing pin located on the fixed component and spring biased into a mating aperture or groove located on the movable component, wherein the securing pin when inserted into the mating aperture or groove secures the moveable component relative to the fixed component.” Applicant submits that support for this amendment is found in the original specification at pages 11, lines 3 through 19, which example is provided by way of explanation and should not be limiting to the scope of the present invention.

Claims 1 and 21 were also amended to recite “a lock comprising at least one fastener spring biased into a mating aperture or groove on at least one of the primary attachment member and secondary attachment member to thereby retain the primary attachment member and the secondary attachment member together.” Applicant submits that support for this amendment is found in the original specification on page 7, line 20 through page 8, line 11, page 8, line 17 through page 9, line 1, and page 14, line 12 through page 15, line 2, which examples are provided by way of explanation and should not be limiting to the scope of the present invention.

In addition, Applicant has amended claim 11 to correct a typographical error and claim 20 has been amended to provide proper antecedent basis. Applicant submits that the amendments to the claims do not introduce new matter and entry thereof is respectfully requested.

C. Rejection on the Merits

1. Section 112 Indefiniteness

Page 3 of the Office Action rejected claim 20 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention. The Office Action asserted that the recitation of “locking means comprises a locking ring or locking pin” in original claim 19 produced a lack of antecedent basis in claim 20. By this response, Applicant has amended claim 20 to now depend from claim 1. As such, Applicant submits that claim 20 has proper antecedent basis. In light of this amendment, Applicant respectfully requests that the section 112 objection be withdrawn.

2. Section 102 Anticipation

Page 3 through 6 of the Office Action rejected claims 1-8, 10, 14, 15 and 21-24 as anticipated by US Patent No. 4,284,172 to Cohen and claims 1 and 10-13 as anticipated by US Patent No. 6,382,353 to Laug. Applicant has cancelled claims 2, 6-8, 14 and 22-23 and thus the anticipation rejections with respect to these claims is rendered moot.

The Cohen reference teaches an adjustable ladder extender assembly safety attachment having Piece A, Piece B and Piece C, and describes each component as follows:

FIG. 1 (Piece A) is a channel shaped bracket having three sides (6, 8, 18) and one open side. Two opposing sides (6, 18) contain holes (3, 4) for securing bracket to a ladder or the like. One side (8) has a diverging member (2) of a prism shape and solid and having eight sides (9, 10, 11, 12, 13, 14, 15, 16) with a hole (5) through said diverging member (2) and exposed on two sides (9, 13).

FIG. 2 (Piece B) is a hollow channel shaped member having four sides (35, 36, 37, 38) of which one side (36) contains a diverging member of a prism shape and hollow and having eight sides (19, 20, 21, 22, 23, 25, 26, 32), each of which containing a hole (24, 27, 28, 29, 30, 31, 33, 34) dimensioned and positioned to accommodate a bolt or the like for purposes of securing Piece B to Piece A when the diverging members of Pieces A and B are placed in a desired position in relation to each other so as to allow a bolt or the like to be passed through a designated hole in

the diverging member of Piece B and the hole in the diverging member of Piece A. The side (36) containing the diverging member also contains two holes (39, 40) which are on either side of the diverging member, and two corresponding holes are contained in the opposite side (38).

FIG. 3 (Piece C) is a bar containing four sides (42, 43 and their two opposite sides) which may be of a solid or hollow construction.

The bar contains a series of holes (41) which are exposed on two opposite sides (43 and its opposing side). The holes are dimensioned and positioned so that when Piece C is passed through the hollow channel of Piece B and so positioned, Piece C will be secured to Piece B when a bolt or the like is passed through the two sets of holes in Piece B and through designated holes in Piece C.

'172 patent, col. 2, ll. 15-48. As shown in Figure 5, and discussed above, Piece C is secured in Piece B using bolts. In addition, securing Piece A to a ladder includes placing bolts in holes 3, 4 formed in the Piece A. The Cohen reference thus teaches that the components of the safety attachment are secured together using bolts which require additional tools in order to place the bolts and tightly secure them.

The Laug reference teaches a slip prevention device for a ladder. As shown in Figure 1 of the Laug reference, the device includes:

curved, angle-adjustable supports 6 . . . being fastened in an articulated manner on the ladder-stringer outer sides. . . [The supports 6] can be swung in and out parallel to the ladder-stringer outer side, can be extended in length in both directions and are connected to pull and/or push rods 3 which are fastened in an articulated manner likewise on the ladder-stringer outer sides, the opposite side of the pull rods 3 being connected in an articulated manner to sleeves 5. The sleeves 5 are arranged on the curved supports 6 such that they can be displaced and secured, and likewise have a corresponding curvature.

'353 patent, col. 3, ll. 56-67. As shown in Figures 1 and 2, the Laug reference also teaches that the slip prevention device can be fastened to a ladder as follows:

The curved supports 6 have a branching-off protrusion 7 . . . [which] serves for fastening the support 6 on the outer side of the ladder. This means that the curved or else rectilinear support 6 remains fully extensible or telescopic in an unobstructed manner in both directions.

At the same time, the supports 6 may be fastened in an articulated manner with the aid of split spindles, which are led through a ladder rung and are screwed within the ladder.

Conical centering stops 1 and 2 are particularly advantageous here. The conical centering stops 1 and 2 allow the split spindles to be braced within the ladder rungs irrespective of the shape and diameter of the ladder rungs, and are centered automatically when the spindles are screwed together. The supports 6 or the pull rods 3 are screwed to the threaded ends projecting on both sides. The split spindles allow the slip prevention device to be fastened on different ladder widths.

'353 patent, col. 4, ll. 59-67, col. 5, ll. 1-9. Thus, the Laug reference teaches that the supports 6 can be fastened to the outer side of a ladder using screw threads.

In contrast, independent claims 1 and 21 recite "a securing pin located on the fixed component and spring biased into a mating aperture or groove located on the movable component, wherein the securing pin when inserted into the mating aperture or groove secures the moveable component relative to the fixed component." The Cohen reference teaches bolts securing Piece B and Piece C together while the Laug reference does not address whether the supports 6 can be lengthened at all. Thus, neither the Cohen or the Laug reference teach "a securing pin . . . spring biased into a mating aperture or groove."

In addition, independent claims 1 and 21 recite "a lock comprising at least one fastener spring biased into a mating aperture or groove on at least one of the primary attachment member and secondary attachment member to thereby retain the primary attachment member and the secondary attachment member together." The Cohen reference teaches bolts securing Piece A and a ladder together while the Laug reference similarly teaches screw threads securing the branching off protrusion 7 to the ladder. Thus, neither the Cohen or Luag references teach "at least one fastener spring biased into a mating aperture or groove."

The fastening mechanisms of Cohen and Laug references are not easily adjustable and require use of tools for removing and tightening a securing bolt. This problem is overcome by the present invention, which provides a quick and easy mechanism for adjusting the extension of the movable component and attaching and separating the primary attachment member and secondary attachment member. Further, the bolt of the prior art could be easily lost as it appears that the bolt is completely detachable from the apparatus. The present invention comprises a securing pin located on the fixed component, which overcomes the problem of loss of the securing pin. The configuration of the cited references are undesirable, especially when moving a ladder between multiple locations requiring different height adjustment. Carrying a screw driver or wrench and a possibility of dropping the bolt renders the apparatus of Cohen and Laug references undesirable.

Furthermore, neither the Cohen nor Laug references teach or suggest “a foot attached to the movable component and pivotable relative thereto” as recited in independent claims 1 and 21. The pivotable foot provides a level contact surface of a bottom part of the movable component to thereby provide a safe and stable contact point with a surface. The apparatus of the Cohen and Laug references lack this feature are less stable and dangerous.

In summary, the features of the present invention provide an apparatus for a ladder or scaffolding that is easy and safe to use. The spring biased securing pin and lock enable the present invention to be attached to a ladder or scaffolding quickly and easily in a “quick release” type manner and also allows for quick and easy adjustment of the movable component relative to the fixed component. It is only the present invention that allows for quick and easy attachment and removal of the apparatus between different ladders and/or scaffolding. There is a need for the present invention, especially as safety regulations are changed requiring safe and effective leveling of

ladders and scaffolding. The apparatus described in the citations lack the features of the present invention and accordingly are awkward and inconvenient to use.

In view of the foregoing, Applicant respectfully requests that the anticipation with respect to independent claim 1 and 21 based on the Cohen and/or Laug reference be withdrawn.

Claims 3-5, 10-13, 15, 21 and 24 depend from independent claims 1 or 21 and thus incorporate the limitations thereof. As such, applicant submits that claims 3-5, 10-13, 15, 21 and 24 are distinguished over the Cohen and/or Laug reference for at least the same reasons as discussed above with regard to independent claims 1 and 21.

3. Obviousness

Page 7 and 8 of the Office Action rejected claims 9, 16-19 and 25-28 as obvious over the Cohen reference and claim 20 as obvious over the Cohen reference in view of US Patent No. 974,643 to Carlson. Applicant has cancelled claim 9, 18, 25, 27 and 28 and thus submits that the obviousness rejection with respect to those claims is rendered moot.

Claims 16, 17, 19 and 26 depend from independent claims 1 or 21 and thus incorporate the limitations thereof. As such, applicant submits that claims 16, 17, 19 and 26 are distinguished over the Cohen and/or Laug reference for at least the same reasons as discussed above with regard to independent claims 1 and 21.

With respect to claim 20, Applicant respectfully submits that the obviousness rejection is improper because the Carlson reference is nonanalogous art. The Carlson reference is directed to an umbrella apparatus. One of skill in the art would not look to the Carlson reference to attempt to solve the problems found in the prior art. Even if the Carlson reference is held to be analogous art, claim 20 depends from independent claim 1 and thus incorporates the limitations thereof. As such,

applicant submits that claim 20 is distinguished over the Cohen and/or Laug reference for at least the same reasons as discussed above with regard to independent claim 1.

D. New Claims

Applicant submits that new claims 29-34 are allowable over the cited references. That is, neither the Cohen reference or the Laug reference teaches “a securing pin located on the fixed component and spring biased into a mating aperture or groove located on the movable component, wherein the securing pin when inserted into the mating aperture or groove secures the moveable component relative to the fixed component” as recited in independent claim 29 or “a lock comprising at least one fastener spring biased into a mating aperture or groove on at least one of the primary attachment member and secondary attachment member to thereby retain the primary attachment member and the secondary attachment member together” as recited in independent claim 30.

Furthermore, claims 31-34 depend from independent claims 1 or 21 and thus incorporate the limitations thereof. As such, applicant submits that claims 31-34 are distinguished over the Cohen and/or Laug reference for at least the same reasons as discussed above with regard to independent claims 1 and 21.

E. Conclusion

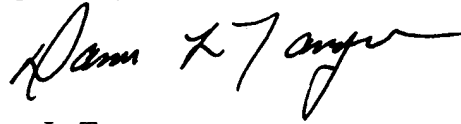
Applicant notes that this response does not discuss every reason why the claims of the present application are distinguished over the cited prior art. Most notably, applicant submits that many if not all of the dependent claims are independently distinguishable over the cited prior art. Applicant has merely submitted those arguments which it considers sufficient to clearly distinguish the claims over the cited prior art.

In view of the foregoing, applicant respectfully requests the Examiner's reconsideration and allowance of claims 1, 3-5, 10-13, 15-17, 19-21, 24, 26 and 29-34 as amended and presented herein.

In the event there remains any impediment to allowance of the claims which could be clarified in a telephonic interview, the Examiner is respectfully requested to initiate such an interview with the undersigned.

Dated this 13 day of October 2004.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Dana L. Tangren", written in a cursive style.

Dana L. Tangren
Attorney for Applicant
Registration No. 37,246
Customer No. 022913
Telephone No. 801.533.9800

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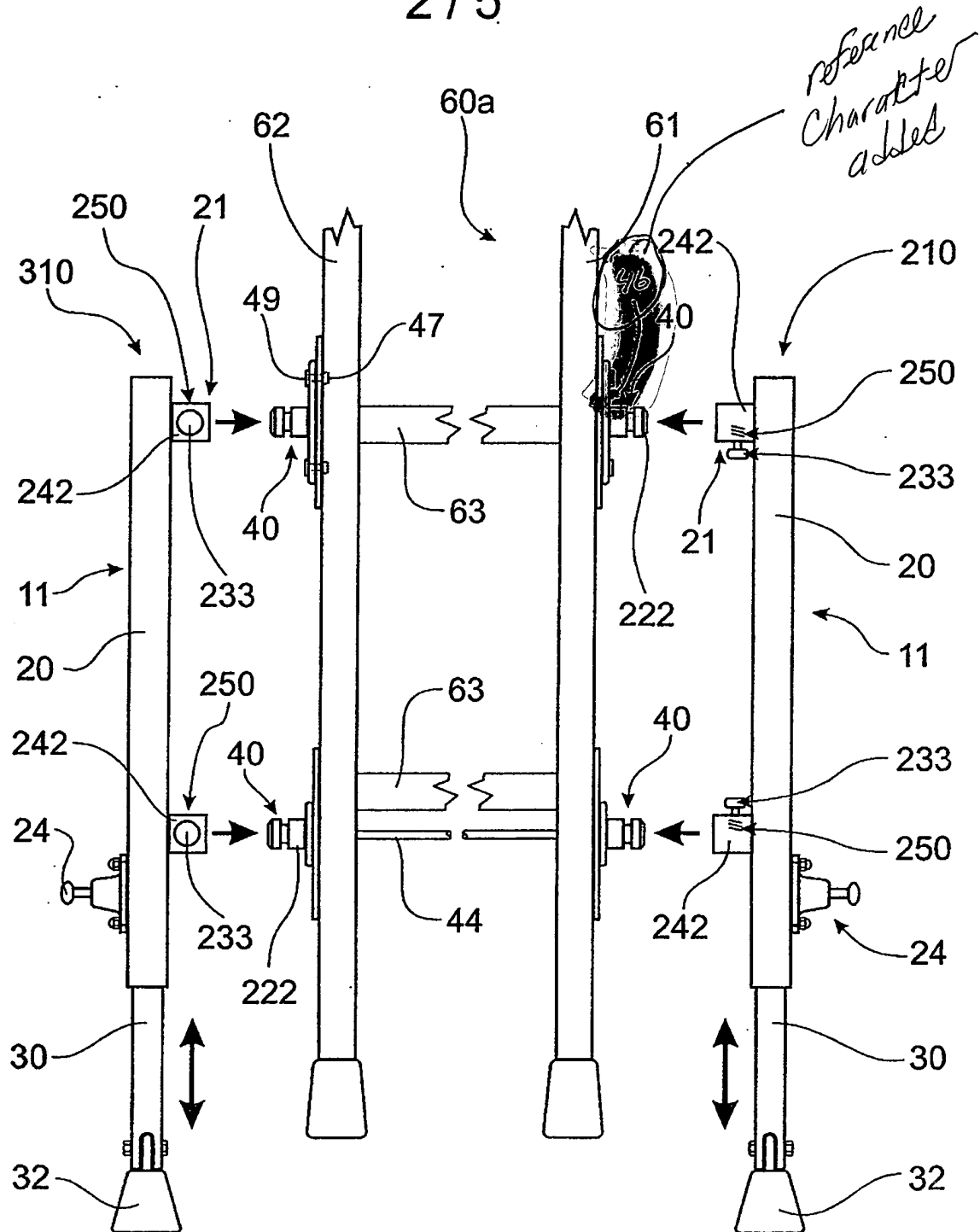


FIG. 2